Lessard-Sams Outdoor Heritage Council

St. Louis River Restoration Initiative, Ph. V

Laws of Minnesota 2018 Accomplishment Plan

General Information

Date: 11/14/2022

Project Title: St. Louis River Restoration Initiative, Ph. V

Funds Recommended: $2,013,000

Legislative Citation: ML 2018, Ch. 208, Art. 1, Sec. 2, subd 5(j)

Appropriation Language: $2,013,000 the second year is to the commissioner of natural resources to restore aquatic habitats in the St. Louis River estuary. Of this appropriation, up to $1,350,000 is for an agreement with Minnesota Land Trust. A list of proposed restorations must be provided as part of the required accomplishment plan.

Manager Information

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Location Information

County Location(s): St. Louis.

Eco regions in which work will take place:

- Northern Forest

Activity types:

- Restore

Priority resources addressed by activity:

- Habitat

Narrative

Abstract

MNDNR's St. Louis River Restoration Initiative (SLRRI) applies a collaborative approach to restore sites impacted by legacy habitat alterations of wood waste, wetland loss and sedimentation to establish ecologically resilient aquatic and riparian fish and wildlife habitat that will establish the St. Louis River Estuary as a premier fishing and outdoor recreation destination. MNDNR will restore 181 acres of priority aquatic and riparian habitat at multiple sites in the lower St. Louis River in partnership with the Minnesota Land Trust. Upon completion, approximately 732 acres of habitat will have been restored as a result of OHF's participation.

Design and Scope of Work

MNDNR continues its collaboration with Minnesota Pollution Control Agency (MPCA), Wisconsin Department of Natural Resources, Army Corps of Engineers, Minnesota Land Trust (MLT) and other agencies to develop and construct projects that will restore aquatic habitat in the Estuary. MNDNR has been actively involved in assessment and planning for restoration and recovery of the St. Louis River Estuary since the early 1980's. The SLRRI was established by MNDNR in 2010 to accelerate implementation of the Lower St. Louis River Remedial Action Plan (RAP) and delisting of the St. Louis River Area of Concern (AOC) by combining the resources of the Great Lakes Restoration Initiative (GLRI) and Minnesota Legacy Amendment. While the AOC is scheduled for delisting in 2025, other estuary projects listed in the RAP will be advanced through the SLRRI's Federal/State partnership.

Past support from the OHF has been applied to several projects critical to restoring estuary fish and wildlife habitat including: (551 acres of restoration completed or in progress)

Phase 5 of the SLRRI continues implementation of the SLRRI with restoration of an additional 36 acres of aquatic and shoreline habitat. MLT will be directly appropriated funds from ML2017 and ML2018 to advance elements of project design and construction in partnership with MNDNR. The top priority for allocating funds from this appropriation is Perch Lake. The other projects identified in the proposal are also priorities for the SLRRI and are being advanced through developed partnerships and processes. Therefore, funds from this allocation will also be applied to support efforts of SLRRI staff to move these project toward construction.

Proposed projects include:

- Perch Lake – A sheltered bay that was isolated from the river by construction of Minnesota Highway 23. This project would enhance the hydrologic connection with the estuary to improve water quality and fish habitat.

- Mud Lake – A sheltered bay impacted by legacy wood waste and bisected by a railroad causeway. This partner driven project would integrate with a MPCA lead remedial project and a City of Duluth project to restore shallow estuary wetland habitat.

- Kingsbury Creek – Degraded cold-water trout stream that drains to Kingsbury Bay. This project would reduce sedimentation, improve trout habitat and protect wetland restoration gains realized in the Kingsbury Bay/Grassy Point Project.

- Keene Creek – Degraded cold-water trout streams that drains to Grassy Point. This partner driven restoration will enhance the creek's connection to its floodplain, reduce sedimentation, restore trout habitat, and increase resiliency of the Grassy Point Project, also funded with earlier OHF appropriations.

- Grassy Point – Potential necessary work in Keene Creek wetlands and other shorelines not completed with funds available from previous appropriations.

- Wild Rice – Additional funds are being requested to advance the broad partnership (MNDNR, WDNR, MLT, Fond du Lac, 1854 Treaty Authority and Great Lakes Indian Fish and Wildlife Commission) restoring estuary wild rice.

- Munger Trail Causeway – A fish and wildlife migration barrier along recently restored Knowlton Creek between the estuary and Magney-Snively Forest Complex. Proposed work will remove the causeway and restore a natural stream channel.

How does the plan address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species?

The 12,000 acre St. Louis River Estuary, at the head of Lake Superior, is a unique Minnesota resource. It is the largest source of biological productivity to Lake Superior as well as the world's largest freshwater shipping port. The combination of extensive wetlands, warmer waters and the connection to Lake Superior resulted in it becoming the primary source of productivity for the western Lake Superior fishery and a critical flyway for waterfowl and other migratory birds. Nearly two-thirds of the estuary's native wetlands have been altered, eliminated or impaired as a result of historic impacts of dredging, filling and waste disposal associated with industrial activities. Although economic uses in the industrialized portion of the estuary continue, many of the historic problems associated with waste disposal have been addressed through the Clean Water Act and subsequent actions. The proposed projects represent an opportunity to balance economic activities, while restoring the negative impacts of historic uses. Additionally, restorations will directly benefit SGCN and other species by improving habitat quality and extent in strategic locations to maximize benefits to populations.

As the Outdoor Heritage Fund's 2009 25-year frame work states, "Success in conservation will depend highly on leveraging traditional and other sources of conservation funding with available OHF funds and coordinating efforts with conservation partners." The proposed project is integrated with local, state, federal, tribal and non-government partners that have worked together to advance projects and secure non-OHF funding at of approximately 50%. Minnesota's legacy funds are an integral part of the overall strategy to restore the health of this unique resource.

Describe how the plan uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

The 1980's were the turning point for the Estuary. As water quality improved, following construction of wastewater and sewage treatment plants, it became clear that the Estuary's fish and wildlife populations could

recover if habitat conditions were restored. MNDNR worked with many local, state and federal resource experts and stakeholders to develop the Lower St. Louis River Habitat Plan (Habitat Plan), a comprehensive science based plan for protecting, restoring and managing fish and wildlife of the St. Louis River Estuary.

Scientists from University of Minnesota, National Oceanic and Atmospheric Administration, U.S. Environmental Protection Agency, U.S. Fish & Wildlife Service, MNDNR and MPCA continue to monitor and evaluate the estuary's fish and wildlife populations and habitat to prioritize restoration projects and model expected outcomes of restoration alternatives to assist in project design and implementation.

Specifically, the AOC partnership used a source-stressor model to identify impairments to the Estuary. The model identified conservation targets, stresses limiting those targets, and recommended actions to address the source of the stress. All project areas supported by the GLRI also require the development of a Quality Assurance Plan to measure the successful outcomes of the conservation actions.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

- H2 Protect critical shoreland of streams and lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

Which two other plans are addressed in this program?

- Lower St. Louis River Habitat Plan
- U.S. Fish and Wildlife Service Strategic Habitat Conservation Model

Which LSOHC section priorities are addressed in this program?

Northern Forest

- Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Does this program include leveraged funding?

-

Non-OHF Appropriations

Year	Source	Amount
2012	Federal (NOAA, NFWF, USEPA, USFWS)	$2,640,000
2014	Federal (NOAA)	$400,000

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

MNDNR Duluth Area Fisheries manages the Lower St. Louis River through regular monitoring, assessment and regulation. They are partnered with the WDNR, the MPCA, USEPA MED Lab, and NOAA's National Estuary Research Reserve in the effort to monitor and address issues associated with the long-term maintenance of habitat restoration outcomes in the estuary.

St. Louis River habitat restoration projects are designed to be maintained by the natural processes that define these systems. Barring catastrophic events, these projects would not require future adjustment, or clean-up. Restoration of submerged aquatic vegetation beds at locations such as the ones proposed will consider the water depth, substrate type and wave energy environment required to maintain these systems. Similarly, stream restoration at proposed locations will take into account all pertinent morphological and geographical information to produce an appropriate and resilient outcome.

Healthy and robust native communities are resistant to invasion by exotic species. If these species successfully establish on a site they can disrupt the foodweb of the native community and result in reduced populations of target species. Restoration of native plant species will inhibit the establishment of invasives and MNDNR is partnered with the other entities described above to control them.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
All years	Fish & Wildlife Game & Fish fund	Regular surveys/monitoring	-	-
All years	WDNR, MPCA, USEPA, NOAA	Long-term monitoring at specific sites	-	-

Activity Details

Requirements

If funded, this program will meet all applicable criteria set forth in MS 97A.056?
Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?
Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program?
Yes

Where does the activity take place?

- Public Waters

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?
No

Timeline

Activity Name	Estimated Completion Date
Perch Lake - Enhance hydraulic connectivity to the estuary and establish desirable sheltered bay bathymetry	December 2020
Mud Lake - Enhance hydrologic connection remove legacy	December 2021

wood waste and restore ecological functions	
Keene Creek - Reduce sedimentation, restore cold-water fisheries habitat and enhance recreational fishing	December 2021
Kingsbury Creek - Reduce sedimentation, restore cold-water fisheries habitat and enhance recreational fishing	December 2019
Wild Rice - Restore wild rice beds in specified areas of the St. Louis River Estuary	December 2023
Munger Trail Causeway - Remove causeway and restore natural stream channel	December 2021

Date of Final Report Submission: 11/01/2023

Availability of Appropriation: Subd. 7. Availability of Appropriation

Money appropriated in this section may not be spent on activities unless they are directly related to and necessary for a specific appropriation and are specified in the accomplishment plan approved by the Lessard-Sams Outdoor Heritage Council. Money appropriated in this section must not be spent on indirect costs or other institutional overhead charges that are not directly related to and necessary for a specific appropriation. Unless otherwise provided, the amounts in this section are available until June 30, 2021. For acquisition of real property, the amounts in this section are available until June 30, 2022, if a binding agreement with a landowner or purchase agreement is entered into by June 30, 2021, and closed no later than June 30, 2022. Funds for restoration or enhancement are available until June 30, 2023, or five years after acquisition, whichever is later, in order to complete initial restoration or enhancement work. If a project receives at least 15 percent of its funding from federal funds, the time of the appropriation may be extended to equal the availability of federal funding to a maximum of six years if that federal funding was confirmed and included in the second draft accomplishment plan. Funds appropriated for fee title acquisition of land may be used to restore, enhance, and provide for public use of the land acquired with the appropriation. Public-use facilities must have a minimal impact on habitat in acquired lands.

Budget

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan.

Grand Totals Across All Partnerships

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	$327,500	-	-	$327,500
Contracts	$1,315,800	-	-	$1,315,800
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	$2,000	-	-	$2,000
Professional Services	$343,700	-	-	$343,700
Direct Support Services	$21,300	-	-	$21,300
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	$600	-	-	$600
Supplies/Materials	$2,100	-	-	$2,100
DNR IDP	-	-	-	-
Grand Total	**$2,013,000**	**-**	**-**	**$2,013,000**

Partner: Minnesota Land Trust

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	$87,000	-	-	$87,000
Contracts	$1,240,800	-	-	$1,240,800
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	$500	-	-	$500
Professional Services	$21,200	-	-	$21,200
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	$500	-	-	$500
DNR IDP	-	-	-	-
Grand Total	**$1,350,000**	**-**	**-**	**$1,350,000**

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Lake Superior Projects Coordinator	0.15	2.0	$40,000	-	-	$40,000
Director of Restoration	0.15	2.0	$47,000	-	-	$47,000

Partner: MNDNR

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	$240,500	-	-	$240,500
Contracts	$75,000	-	-	$75,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	$1,500	-	-	$1,500
Professional Services	$322,500	-	-	$322,500
Direct Support Services	$21,300	-	-	$21,300
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	$600	-	-	$600
Supplies/Materials	$1,600	-	-	$1,600
DNR IDP	-	-	-	-
Grand Total	**$663,000**	**-**	**-**	**$663,000**

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Office & Administrative Specialist	0.75	1.0	$61,100	-	-	$61,100
AOC Coordinator	0.5	2.0	$120,200	-	-	$120,200
Habitat Coordinator	0.25	2.0	$59,200	-	-	$59,200

Amount of Request: $2,013,000
Amount of Leverage: -
Leverage as a percent of the Request: 0.0%
DSS + Personnel: $348,800
As a % of the total request: 17.33%
Easement Stewardship: -
As a % of the Easement Acquisition: -

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?
The reduced amount of funding from the proposed request will be applied to the construction contract for Perch Lake. Additional funding for Perch Lake will be requested in future years to match $3.5 million to be awarded by the USEPA in federal fiscal year 2018.

Contracts

What is included in the contracts line?
All of the funds in the contract line are for R/E work.

Travel

Does the amount in the travel line include equipment/vehicle rental?
-

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:
No

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?
MNDNR's Office of Budget Management & Budget services provided a Direct and Necessary calculator to determine shared support services. The shared services costs and budget are reviewed and approved by their staff.

Federal Funds

Do you anticipate federal funds as a match for this program?
Yes

Are the funds confirmed?
No

What is the approximate date you anticipate receiving confirmation of the federal funds?
January 1, 2018

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	0	0	36	36
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	**0**	**0**	**0**	**36**	**36**

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	$2,013,000	$2,013,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-
Total	**-**	**-**	**-**	**$2,013,000**	**$2,013,000**

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	0	0	36	36
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**36**	**36**

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	$2,013,000	$2,013,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**$2,013,000**	**$2,013,000**

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	$55,916
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	$55,916
Protect in Fee with State PILT Liability	-	-	-	-	-

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-

Target Lake/Stream/River Feet or Miles

Outcomes

Programs in the northern forest region:

- Improved availability and improved condition of habitats that have experienced substantial decline ~ *The construction contractor will be required to produce as-built measurements to verify that the contracted design for the projects were built as designed or modified as a result of direct in the field oversight of construction.*

Once the projects are satisfactorily constructed, the MNDNR will work in partnership with the MLT, USEPA, the MPCA and other AOC partners to conduct biological sampling intended to monitor the outcome of these and all other AOC projects. Some of projects were not funded by the OHF, but will be monitored as part of this broader program.

Parcels

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Parcel Information

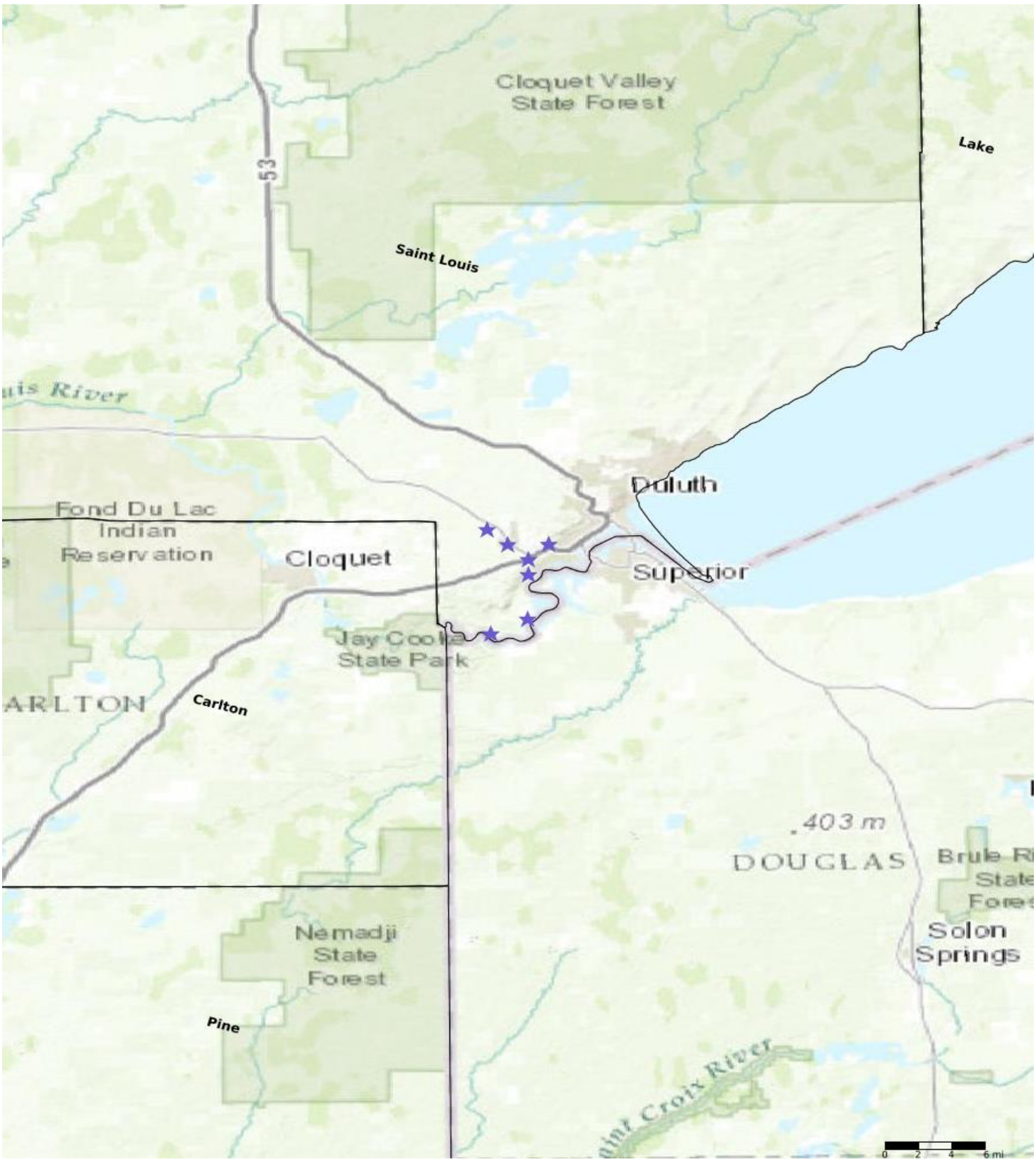
Sign-up Criteria?
No

Explain the process used to identify, prioritize, and select the parcels on your list:

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Mud Lake	St. Louis	04815202	10	$0	Yes
Munger Trail Causeway	St. Louis	04915223	1	$0	Yes
Keene Creek	St. Louis	04915212	5	$0	Yes
Kingsbury Creek	St. Louis	04915214	5	$50,000	Yes
Wild Rice	St. Louis	04915210	10	$25,000	Yes
Perch Lake	St. Louis	04815209	5	$863,000	Yes
Interstate Island	St. Louis	04915204	0	$400,000	Yes

Parcel Map



- Protect in Easement
- Protect in Fee with PILT
- Protect in Fee W/O PILT
- Restore
- Enhance
- Other